2.2.4.5.4.7 "TRANSMIT MSO" Field Encoding

The "TRANSMIT MSO" field is a 6-bit (bits 1 through 6 of byte 25) field that **shall** be used to encode the 6 LSBs of the Message Start Opportunity (§2.2.6.2.1) determined for this message transmission.

2.2.4.5.4.8 Reserved Bits

Bits 7 and 8 of byte 25 are reserved for future use and **shall** be set to ALL ZEROs for equipment conforming to this MOPS.

Note: This field is reserved for future reporting of Barometric Altitude Quality (BAQ).

2.2.4.5.4.9 "NAC_P" Field Encoding

The Navigation Accuracy Category for Position ("NAC_P") field is a 4-bit (bits 1 through 4 of byte 26) field used for applications to determine if the reported State Vector has sufficient position accuracy for the intended use. The encoding of the "NAC_P" field **shall** be as indicated in <u>Table 2-45</u>. The value of the NAC_P parameter **shall** be the highest value in Table 2-45 consistent with the NAC_P Input with the exception that if the NAC_P Input is consistent with a value of "10" or "11" and the ADS-B equipment does not support the timing requirements for the Precision condition (§2.2.7.2.2), then a NAC_P value of "9" **shall** be transmitted.

If the "NAC_P" field is "unavailable" for the "Data Lifetime" value listed for this input in Table 2-64, then the "NAC_P" field **shall** default to a value of ALL ZEROs.

NAC _P (binary) MSB LSB	NAC _P (decimal)	95% Horizontal and Vertical Accuracy Bounds (EPU and VEPU)	Comment	Notes
0000	0	$EPU \ge 18.52 \text{ km } (10 \text{ NM})$	Unknown accuracy	
0001	1	EPU < 18.52 km (10 NM)	RNP-10 accuracy	1
0010	2	EPU < 7.408 km (4 NM)	RNP-4 accuracy	1
0011	3	EPU < 3.704 km (2 NM)	RNP-2 accuracy	1
0100	4	EPU < 1852 m (1NM)	RNP-1 accuracy	1
0101	5	EPU < 926 m (0.5 NM)	RNP-0.5 accuracy	1
0110	6	EPU < 555.6 m (0.3 NM)	RNP-0.3 accuracy	1
0111	7	EPU < 185.2 m (0.1 NM)	RNP-0.1 accuracy	1
1000	8	EPU < 92.6 m (0.05 NM)	e.g., GPS (with SA)	
1001	9	EPU < 30 m <u>and</u> VEPU < 45 m	e.g., GPS (SA off)	2
1010	10	EPU < 10 m <u>and</u> VEPU < 15 m	e.g., WAAS	2
1011	11	EPU < 3 m and VEPU < 4 m	e.g., LAAS	2
1100	12	(Reserved)		
1101	13	(Reserved)		
1110	14	(Reserved)		
1111	15	(Reserved)		

Table 2-45: "NAC_P" Encoding

Notes:

1. RNP accuracy includes error sources other than sensor error, whereas horizontal error for NAC_P only refers to horizontal position error uncertainty.